- 1. Hazardous Waste Determination. The issue, as presented, is who, by job, must make the determination whether a waste is "Hazardous", where the waste is at when that determination is made, and when the determination must be made.
  - a. Who makes the determination? 40 CFR Section 261.11 states: "A person who generates a solid waste...must determine if that waste is a hazardous waste." A 16 August 2002 Memorandum from Elizabeth Cotsworth, of EPA's Office of Solid Waste, clarifies what constitutes a "person". It is not necessarily the person in the laboratory. Per her memorandum, it could be anyone within the organization. Inclusion of this guidance in the regulation would be helpful.
    - i. I would suggest a further interpretation that would permit a party acting on behest of the organization could make the determination. For example, a "turn-key" chemical waste handler could make the determination during the removal process.
    - ii. At this institution the determination is usually made by EH&S personnel although in some instances, such as large lab clean outs, we have used brokers.
    - iii. To some extent the process runs afoul of definitions, within RCRA the term "Hazardous Waste" applies to a limited number substances with specific characteristics or nomenclature. In normal usage "hazardous" is any substance, which could cause harm to individuals, material, or the environment. It is this later interpretation that we use within the academic community. Laboratory personnel are charged with knowing the potential dangers associated with the material they are working with, proper packaging of excess/waste material, and correct labeling of same (we prefer labels that use terms such as "CHEMICAL WASTE" with a list of constituents, avoiding the term "HAZARDOUS") EH&S provides general guidance and specific assistance but researchers are not burdened with another set of regulations.
  - b. Where is the waste when the determination is made? Shouldn't make any difference as long as it is within the geographical confines defined by the EPA generator registration.
  - c. When must the waste determination be made? A stringent interpretation of the regulation would dictate: within three days. However, a more logical requirement is before the waste is disposed of/shipped or within the disposal time limit (90-180 days), whichever comes first. This would necessitate some relaxation of the stringent 3-day requirement for labeling a substance as "HAZARDOUS WASTE", if that applies.

- 2. Satellite Accumulation Area (SAA) Accumulation Time:
  - a. Not necessarily directly related to the questions, suggest that EPA provide a formal definition of the term Satellite Accumulation Area or use a different term. To the best of my knowledge, it is not defined within the regulations, although the term appears in inspection checklists and protocols. The various interpretations of "Satellite" have been the topic of numerous professional papers depending on the interpretation this institute has from 0 to 1,000 SAA's. Further, the term satellite implies the existence of something akin to a Central Accumulation Area. The existence of such a facility is implied in the regulations, but not, to the best of my knowledge required. This institution, due to construction schedules operated (albeit at a cost in efficiency and dollars) without such a facility for six months shipping direct from research facilities. We are aware of some institutions that, due to space constraints, pursue this latter course as standard procedure.
  - b. The regulation does not, I believe, require removal of waste from an "SAA". What is required within the time limit is proper packaging, labeling, starting the 90/180-day clock and (maybe) periodic inspection. This would still require a visit from EH&S, if they are the operable party, but the interpretation that removal is required reverts to the discussion, above, concerning the necessity for a Central Accumulation Area. One area of concern is what constitutes the "3" days: actual calendar days or normal business days. We prefer, and use the latter as criterion.
  - c. With respect to the other questions listed, we can only offer our experience, fully aware that other institutions have different staffing and different requirements.
    - i. Few laboratories have the physical space to accumulate 55 gallons of waste. We do have some, however, which actually use 55-gallon containers for waste collection.
    - ii. When a pick-up is requested, part of the request indicates how much waste is present if necessary; we can prioritize servicing to meet the larger amounts. Adherence to the limits on "acute" wastes in more problematic; as we have not specifically promulgated a listing of these wastes, we may not know ahead of time if 1 qt (or more) of this type waste exists. We would, therefore, welcome a relaxation of this part of the regulation.
    - iii. We, generally, don't have a significant problem in the timing of waste removal. Our average response time across 1200 pick-ups per year is 1.2 days (unadjusted for weekends and holidays). There are some seasonal surges driven by the academic calendar. The bulk of the material handled, however, results from on-going research not apparently tied to any set period.

3. Treatment in SAAs. We would welcome the expansion of acceptable "in lab" treatment methods as an option. From experience, however, we tend to discourage such actions. Treatment occurs at the end of a process and does not impact research results. Hence, disregard of protocols or less than perfect performance is much more likely at this point, possibly resulting in unwanted reactions or spills.